GENERAL PURPOSE RELAYS



c3controls offers a full line of General Purpose Relays ("plug-in" relays), perfect for your control logic applications. Quick and economical to install, our relays allow for easy maintenance and assembly. c3's relays come in a variety of base configurations, and we even offer hermetically sealed relays for hazardous locations.



Se	ection 26
Octal Base w/Pin	4
Square Base w/Blade	6
Flange Mounted w/Blade	10
Miniature Square w/Blade	12
Hermetically Sealed Octal Base w/Pin	20
Hermetically Sealed Miniature Square w/Blade	22
Pin & Blade Sockets	24
Retainer Clips	26
Dimensions	27

PROVEN







Conformity to Standards: GENERAL PURPOSE RELAYS

UL 508

HERMETICALLY SEALED RELAYS

UL 508, 1604 IEC 60947-1, 60947-4-1

SOCKETS

UL 508 IEC 60947-1

Certifications:

UL File #: E236197 (Guide NLDX2, NLDX8), E224085 (Guide NRNT2)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

UL File #: E243998 (Guide NPKR, NPKR2, NPKR7, NPKR8)

CSA File #: 227135

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

UL File #: E236196 (Guide SWIV2, SWIV8)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)



GENERAL PURPOSE RELAYS

Every c3controls product is designed and manufactured to meet the needs of the machine builder, including our comprehensive line of General Purpose Relays. Check out all the features of our Series GR below!

QUICK AND ECONOMICAL—PERFECT FOR ALL YOUR CONTROL LOGIC APPLICATIONS.					
✓ Proven	Our general purpose relays meet UL, CSA and IEC standards requirements making them suitable for use in global applications.				
✓ Multiple Styles	Our line of General Purpose Relays for Ordinary and Hazardous locations are available in Octal Base, Square Base, Flange Mounted, Miniature, and Hermetically Sealed.				
✓ Convenient Customization	Pin and blade terminal styles are interchangeable with other commonly available relays.				
✓ Easy Reference	Schematic diagrams and terminal markings are located right on the relay for easy reference during installation.				
✓ Power Savings	Low coil consumption minimizes transformer and power supply requirements.				
√ Transparent Housing	Allows you to see switching operations and the condition of the contacts.				
✓ Wide Range of Specifications	Pole combinations are available in SPDT, DPDT, 3PDT, 4PDT with a carrying current rating of 5A-25A.				
✓ Environmentally Safe	Our AgNi contacts are cadmium free and environmentally friendly.				
✓ Limited Lifetime Warranty*	Every product is backed by our limited lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.				
✓ Guaranteed Same-Day Shipping*	Product availability reduces inventory, and improves cash-flow—saving you money. With c3controls any order for standard catalog items received by 6:00pm ET is guaranteed to ship same-day.				
√ Advantage Pricing	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.				

^{*}See c3controls Terms & Conditions

For years, c3controls has helped us meet the rigorous specifications for quality and performance on all of our systems, while also providing us superior service and delivery.



Square Base Relay with Blade Terminals



Octal Base Relay with Pin Terminals



Miniature Slim Line Square Base Relay with Blade Terminals



Hermetically Sealed Octal Base Relay with Pin Terminals



UNIQUE PRODUCT LINE FEATURES

CLASS 1, DIVISION 2



Our hermetically sealed metal enclosures have a temperature code of T4A and are suitable for use in Class 1, Division 2 Group A, B, C and D, and Zone 2, Group IIA, IIB, and IIC Hazardous locations.

ZERO CONTAMINANTS



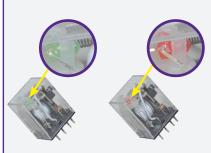
The hermetically sealed relays are vacuum baked and dry nitrogen filled to remove contaminants and provide a clean and dry atmosphere for contacts.

MECHANICAL ACTUATOR



Optional mechanical actuator and indicating light for checking the control circuit operation without energizing the relay.

QUICK IDENTIFICATION



Tape wound coils are marked with the coil voltage and our optional indicating lights are color coded, red for AC and green for DC.

FLANGE MOUNTED RELAY

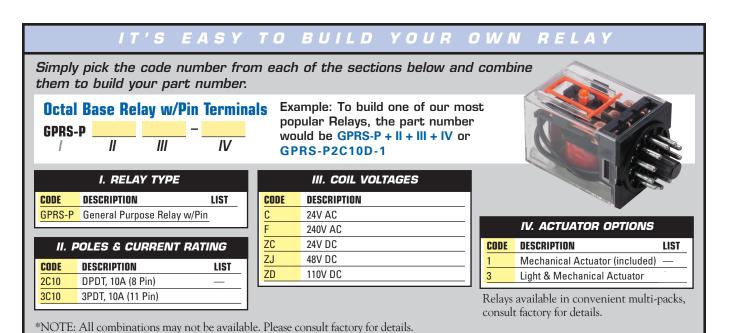


Flange mounting eliminates the need for a socket resulting in lower installation costs.



OCTAL BASE RELAYS WITH PIN TERMINALS

- DPDT and 3PDT for control circuit application flexibility.
- 10A, DPDT and 10A, 3PDT.
- AC and DC coils.
- Pin terminals are interchangeable with other commonly available relays.
- Tape wound coils are marked with the coil voltage for easy identification.
- AgNi contacts, environmentally friendly cadmium free.
- 100% tested to ensure performance to specification.
- Mechanical actuator provided as standard for checking the control circuit operation without energizing the relay.
- Optional indicating light (red for AC, green for DC) to easily determine the relay status.
- Schematic diagram and terminal markings on the relay for easy reference during installation.
- Low coil consumption to minimize transformer and power supply requirements.
- cURus and CE for acceptance in global applications.
- Transparent housing to visually monitor switching operations and contact condition.



	COMPATIBLE SOCKETS
RELAY TYPE	COMPATIBLE SOCKETS
GPRS-P2C10**	GPRA-SP08G1 with IP20 Guarded Terminals or GPRA-SP08U1 with Open Style Terminals
GPRS-P3C10**	GPRA-SP11G1 with IP20 Guarded Terminals or GPRA-SP11U1 with Open Style Terminals
NOTE: **Represe	nts the Coil Voltage Code. Refer to Chart III <i>Coil Voltage</i> above.
See page 24 for so	ocket information.





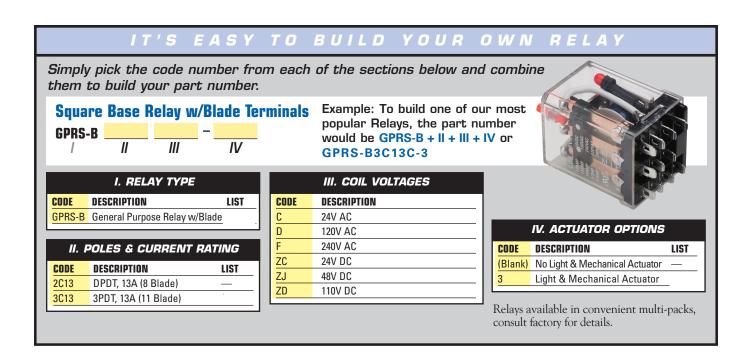
		RELAYS WITH F	IN TERIVINAL	.5			
	UNI	TS					
ELECTRICAL RATINGS	<u></u>						
POLE COMBINATION	<u></u>		DP			TOT	
Contact Resistance	m!		50		50		
Dielectric Strength (Coil to Contact)		60 HZ - 1 Minute)		0 V	1000 V		
Dielectric Strength (Between Contacts)	, .	60 HZ - 1 Minute)	1000 V		1000 V		
Insulation Resistance (500 VDC)	ΜΩ [10	0	100		
Max. Switching (ON/OFF) Mechanical	•	/Min.	240		240		
Max. Switching (ON/OFF) Electrical		Oper./Min.)		30	
Life Expectancy - Mechanical		ons [Min]	10	M	10	M	
Life Expectancy - Elect (@120 V Resistive)	Operation	ons [Min]	100			00K	
Vibration: Endurance	1.5 mm (Doub	le Amplitude)	10 ~	55 Hz	10 ~	55 Hz	
Vibration: Error Operation	1.5 mm (Doub	le Amplitude)	10 ~	55 Hz	10 ~	55 Hz	
Shock: Endurance	G N	∕lin.	50)	!	50	
Shock: Error Operation	G N	∕lin.	10	1		10	
Coil Operate Time (Pick-Up)	mSec	(Max.)	25	j		25	
Coil Release Time (Drop Out)	mSec	(Max.)	25	j	:	25	
CONTACT RATING							
Rated Carrying Current			10	A	10) A	
Max. Allowable Voltage			240	VAC	240	240 VAC	
			120	VDC	120	VDC	
Capacity: Resistive Load	P.F. =	= 1.0	240 VA0	C - 10 A	240 VA	C - 10 A	
			120 VAC - 10 A		120 VAC - 10 A		
		28 VDC - 10 A		28 VDC - 10 A			
Inductive Loads	P.F. = 0.4 [L/R = 7 mSec.]		240 VAC - 7 A		240 VAC - 7 A		
			120 VA0	C - 10 A	120 VAC - 10 A		
			28 VD0	C - 8 A	28 VD	C - 8 A	
Minimum Recommended Load			10 VDC	- 10 mA	10 VDC	- 10 mA	
COIL SPECIFICATIONS (@ 20° C) —			!				
(DPDT & 3PDT)							
NOMINAL COIL VOLTAGE (VOLTS)	Nominal Current (mA)	Coil Resistance (+/- 10% OHMS)	Power Consumption	Pick-Up Voltage	Drop-Out Voltage	Max. Allowed Voltage	
24 VAC (@ 60 HZ)	88	91	1.9 ~ 2.8 VA	80% Max.	30% Min.	110%	
240 VAC (@ 60 HZ)	11	7,100	1.9 ~ 2.8 VA	Rated	Rated	Rated	
24 VDC	56	430	1.5 W	000/ 84	400/ 84:	4400/	
48 VDC	29.5	1,630	1.5 W	80% Max. Rated	10% Min. Rated	110%	
110 VDC	16.2	6,800	1.5 W	nateu	nateu	Rated	
ENVIRONMENTAL/PHYSICAL PARAMETERS							
Operating Ambient Temperature	-1	0° to +40° C (14° to +1	04° F) Assumes a	DRY environmen	t — Enclosed		
Operating Humidity		35%	to 85% RH (Recom	imended)			
Jnit Weight (2 ~ 3 Pole Relay)			85g (3oz.)				
		See outlin	e drawings on pa	ges 27 - 32			
Relay and Socket Dimensions			J 1	-			
MATERIALS & CONSTRUCTION			AaNi Allov				
Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts Plated Brass Terminations			AgNi Alloy Cadmium Fre	90			
MATERIALS & CONSTRUCTION Contacts Plated Brass Terminations			Cadmium Fre	96			
MATERIALS & CONSTRUCTION Contacts		Th					



SQUARE BASE RELAYS WITH BLADE TERMINALS

- DPDT and 3PDT for control circuit application flexibility.
- 13A, DPDT and 13A, 3PDT.
- 1/3HP @ 120V AC, 1/2HP @ 240V AC.
- AC and DC coils.
- Blade terminals (3/16") are interchangeable with other commonly available relays.
- Tape wound coils are marked with the coil voltage for easy identification.
- AgNi contacts, environmentally friendly cadmium free.
- cURus and CE for acceptance in global applications.

- Optional mechanical actuator and indicating light (red for AC and green for DC) for checking the control circuit operation without energizing the relay and to easily determine the relay status.
- Schematic diagram and terminal markings on the relay for easy reference during installation.
- Low coil consumption to minimize transformer and power supply requirements.
- Transparent housing to visually monitor switching operations and contact condition.
- 100% tested to ensure performance to specification.



	COMPATIBLE SOCKETS
RELAY TYPE	COMPATIBLE SOCKETS
GPRS-B2C13**	GPRA-SB11G1 with IP20 Guarded Terminals or
GPRS-B3C13**	GPRA-SB11U1 with Open Style Terminals
NOTE: **Represen	ts the Coil Voltage Code. Refer to Chart III Coil Voltage above.
See page 25 for so	cket information.



Square Base w/Blade Terminals / GENERAL PURPOSE



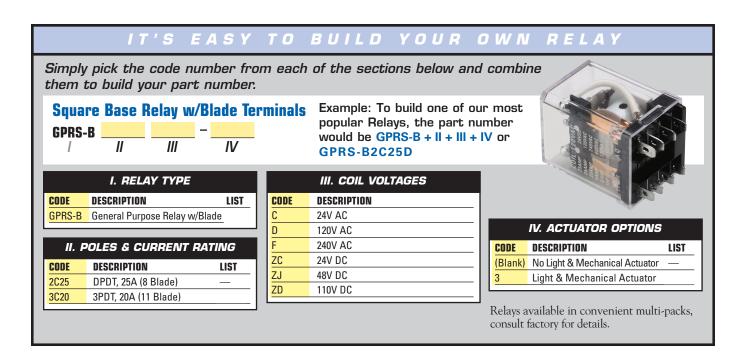
	SQUARE BASE RELAY WITH I	BLADE TERMIN	ALS		
	UNITS				
ELECTRICAL RATINGS					
POLE COMBINATION		DF	TOT	31	TOT
Contact Resistance	mΩ	Ę	0	!	50
Dielectric Strength (Coil to Contact)	AC Volts (50/60 HZ - 1 Minute)	150	00 V	150	00 V
Dielectric Strength (Between Contacts)	AC Volts (50/60 HZ - 1 Minute)	100	0 V	100	00 V
Insulation Resistance (500 VDC)	MΩ [Min.]	1	00	1	00
Max. Switching (ON/OFF) Mechanical	Oper./Min.	3	00	3	00
Max. Switching (ON/OFF) Electrical	Oper./Min.		30		30
Life Expectancy - Mechanical	Operations [Min]	10	M	10	0M
Life Expectancy - Elect (@120 V Resistive)	Operations [Min]		100K		00K
Vibration: Endurance	1.5 mm (Double Amplitude)		55 Hz		55 Hz
Vibration: Error Operation	1.5 mm (Double Amplitude)		55 Hz		55 Hz
Shock: Endurance	G Min.		i0		50
Shock: Error Operation	G Min.		0		10
Coil Operate Time (Pick-Up)	mSec (Max.)		5		15
Coil Release Time (Drop Out)	mSec (Max.)	1	0	,	10
CONTACT RATING				Г	
Rated Carrying Current			BA		3 A
Max. Allowable Voltage			VAC		VAC
			VDC		VDC
Capacity: Resistive Load	P.F. = 1.0	_	C - 10 A		C - 10 A
			C - 13 A	_	C - 13 A
			C - 13 A		C - 13 A
Inductive Loads	P.F. = 0.4 [L/R = 7 mSec.]	240 VA		_	AC - 7 A
			C - 10 A	_	C - 10 A
			C - 8 A		C - 8 A
Motor Loads	120 VAC 240 VAC		HP HP		3 HP 2 HP
Minimum Recommended Load	Z40 VAC	10 VDC		· ·	- 10 mA
COIL SPECIFICATIONS (@ 20° C) — (DPDT)		10 400	- 10 IIIA	10 400	- 10 IIIA
COIL SPECIFICATIONS (@ 20 C) — (DPDI)		Power	Pick-Up	Drop-Out	Max. Allowe
NOMINAL COIL VOLTAGE (VOLTS)	Coil Resistance (+/- 10% OHMS)	Consumption	Voltage	Voltage	Voltage
				voitage	Torrago
24 VAC (@ 60 HZ)	85	2.5 VA	85% Max	/	
	85 2,250	2.5 VA 2.5 VA	85% Max.	30% Min.	110%
24 VAC (@ 60 HZ)			85% Max. Rated	30% Min. Rated	110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ)	2,250	2.5 VA	Rated	Rated	Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ)	2,250 9,110	2.5 VA 2.5 VA	Rated 80% Max.	Rated 10% Min.	Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC	2,250 9,110 472	2.5 VA 2.5 VA 1.5 W	Rated	Rated	Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC	2,250 9,110 472 1,800	2.5 VA 2.5 VA 1.5 W	Rated 80% Max.	Rated 10% Min.	Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC	2,250 9,110 472 1,800	2.5 VA 2.5 VA 1.5 W	Rated 80% Max.	Rated 10% Min.	Rated 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT)	2,250 9,110 472 1,800	2.5 VA 2.5 VA 1.5 W 1.5 W	Rated 80% Max. Rated	Rated 10% Min. Rated	Rated 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC	2,250 9,110 472 1,800 10,000	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W	Rated 80% Max. Rated Pick-Up Voltage	Rated 10% Min. Rated Drop-Out Voltage	Rated 110% Rated Max. Allowe Voltage
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS)	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS)	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W	Rated 80% Max. Rated Pick-Up Voltage 85% Max.	Rated 10% Min. Rated Drop-Out Voltage 30% Min.	Rated 110% Rated Max. Allowe Voltage 110%
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ)	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA	Rated 80% Max. Rated Pick-Up Voltage	Rated 10% Min. Rated Drop-Out Voltage	Rated 110% Rated Max. Allowe Voltage
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VAC (@ 60 HZ)	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 1.5 W	Rated 80% Max. Rated Pick-Up Voltage 85% Max. Rated	Rated 10% Min. Rated Drop-Out Voltage 30% Min. Rated	Max. Allowe Voltage
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W	Rated 80% Max. Rated Pick-Up Voltage 85% Max. Rated 80% Max.	Rated 10% Min. Rated Drop-Out Voltage 30% Min. Rated	Rated 110% Rated Max. Allowe Voltage 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 1.5 W	Rated 80% Max. Rated Pick-Up Voltage 85% Max. Rated	Rated 10% Min. Rated Drop-Out Voltage 30% Min. Rated	Max. Allowe Voltage
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472 1,800 10,000	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W	Pick-Up Voltage 85% Max. Rated 85% Max. Rated 80% Max. Rated	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowe Voltage 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 24 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472 1,800 10,000	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W	Pick-Up Voltage 85% Max. Rated 80% Max. Rated 80% Max. Rated	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowe Voltage 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472 1,800 10,000	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W	Pick-Up Voltage 85% Max. Rated 80% Max. Rated 80% Max. Rated	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowe Voltage 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 24 VAC (@ 60 HZ) 24 VDC 48 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay)	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472 1,800 10,000 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W 1.5 W 90 (3.20z.)	Pick-Up Voltage 85% Max. Rated 80% Max. Rated 80% Max. Rated DRY environment	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowe Voltage 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 24 VAC (@ 60 HZ) 24 VDC 48 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472 1,800 10,000 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W	Pick-Up Voltage 85% Max. Rated 80% Max. Rated 80% Max. Rated DRY environment	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowe Voltage 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 24 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472 1,800 10,000 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W 1.5 W 90 (3.20z.)	Pick-Up Voltage 85% Max. Rated 80% Max. Rated 80% Max. Rated DRY environment	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowe Voltage 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472 1,800 10,000 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W 1.5 W 90 (3.20z.)	Pick-Up Voltage 85% Max. Rated 80% Max. Rated 80% Max. Rated DRY environmen nmended)	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowe Voltage 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472 1,800 10,000 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W 1.5 W 1.5 W 1.6 W 1.6 W 1.75 W	Pick-Up Voltage 85% Max. Rated 80% Max. Rated 80% Max. Rated DRY environmen nmended)	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowe Voltage 110% Rated
24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts	2,250 9,110 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 72 1,700 7,200 472 1,800 10,000 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W 1.5 W 1.6 W 1.6 W 1.75 W 1.7	Pick-Up Voltage 85% Max. Rated 80% Max. Rated 80% Max. Rated DRY environmen nmended) ages 27 - 32	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowe Voltage 110% Rated



SQUARE BASE RELAYS WITH BLADE TERMINALS

- DPDT and 3PDT for control circuit application flexibility.
- 25A, DPDT and 20A, 3PDT.
- Maximum 1/2HP @ 120V AC, 1/2HP @ 240V AC.
- AC and DC coils.
- Blade terminals (3/16") are interchangeable with other commonly available relays.
- Tape wound coils are marked with the coil voltage for easy identification.
- AgNi contacts, environmentally friendly cadmium free.

- cURus and CE for acceptance in global applications.
- Optional mechanical actuator and indicating light (red for AC and green for DC) for checking the control circuit operation without energizing the relay and to easily determine the relay status.
- Low coil consumption to minimize transformer and power supply requirements.
- Transparent housing to visually monitor switching operations and contact condition.
- 100% tested to ensure performance to specification.



	COMPATIBLE SOCKETS
RELAY TYPE	COMPATIBLE SOCKETS
GPRS-B2C25**	GPRA-SB11G1 with IP20 Guarded Terminals or
GPRS-B3C20**	GPRA-SB11U1 with Open Style Terminals
NOTE: **Represents	the Coil Voltage Code. Refer to Chart III Coil Voltage above.
See page 25 for sock	xet information.





	SQUARE BASE RELAYS WITH	BLADE TERMIN	VALS			
TI FOTDIONI DATINO	UNITS					
ELECTRICAL RATINGS			IDT.		n.	
POLE COMBINATION	0		OT CONTRACTOR OF THE PROPERTY		TOT	
Contact Resistance	mΩ	5	~		50	
Dielectric Strength (Coil to Contact)	AC Volts (50/60 HZ - 1 Minute)	150			00 V	
Dielectric Strength (Between Contacts)	AC Volts (50/60 HZ - 1 Minute)		0 V		00 V	
Insulation Resistance (500 VDC)	MΩ [Min.]		00		00	
Max. Switching (ON/OFF) Mechanical Max. Switching (ON/OFF) Electrical	Oper./Min. Oper./Min.		10 10		40 30	
Life Expectancy - Mechanical	Oper./Min. Operations [Min]					
Life Expectancy - Mechanical Life Expectancy - Elect (@120 V Resistive)	Operations [Min]	10M 10M 100K 100K				
Vibration: Endurance	1.5 mm (Double Amplitude)		100K 10 ~ 55 Hz		100K 10 ~ 55 Hz	
Vibration: Error Operation	1.5 mm (Double Amplitude)	10 ~ !			55 Hz	
Shock: Endurance	G Min.		0		50	
Shock: Error Operation	G Min.		0		10	
Coil Operate Time (Pick-Up)	mSec (Max.)		5		15	
Coil Release Time (Drop Out)	mSec (Max.)		0		10	
CONTACT RATING	moee (wax.)		0		10	
Rated Carrying Current		25	iΑ	21) A	
Max. Allowable Voltage			VAC		VAC	
viax. Allowable voltage			VDC		VDC	
Capacity: Resistive Load	P.E. = 1.0		C - 25 A	240 VA		
oupuoity. Hoolotivo Loud	1 – 1.0		C - 25 A	120 VA		
			C - 25 A	28 VDC		
Inductive Loads	P.F. = 0.4 [L/R = 7 mSec.]		C - 15 A	240 VA		
madouve Louds	1.1. – 0.4 [2/11 – 7 111000.]		C - 25 A	120 VA		
		-	C - 18 A	28 VD0		
Motor Loads	120 VAC	3/4			HP	
	240 VAC		HP		HP	
Minimum Recommended Load		100	mA	100	mA	
COIL SPECIFICATIONS (@ 20° C) — (DPDT)						
		Power	Pick-Up	Drop-Out	Max. Allowe	
NOMINAL COIL VOLTAGE (VOLTS)	Coil Resistance (+/- 10% OHMS)	Consumption	Voltage	Voltage	Voltage	
24 VAC (@ 60 HZ)	72	2.5 VA	85% Max.	30% Min.	110%	
120 VAC (@ 60 HZ)	1,700	2.5 VA	Rated	Rated	Rated	
240 VAC (@ 60 HZ)	7,200	2.5 VA				
24 VDC	472	1.5 W	75% Max.	10% Min.	110% Max	
48 VDC	1,800	1.5 W	Rated	Rated	Rated	
110 VDC	10,000	1.5 W				
COIL SPECIFICATIONS (@ 20° C) — (3PDT)			T		T	
NOMINAL COIL VOLTAGE (VOLTS)	Coil Resistance (+/- 10% OHMS)	Power Consumption	Pick-Up	Drop-Out Voltage	Max. Allowe	
			Voltage	voitage	Voltage	
24 VAC (@ 60 HZ)	60	2.75 VA 2.75 VA	85% Max.	30% Min.	110%	
120 VAC (@ 60 HZ)	1,300		Rated	Rated	Rated	
240 VAC (@ 60 HZ)	4,300 340	2.75 VA				
24 \/DC		1.5 W	75% Max.	10% Min.	110% Max	
24 VDC		1 E \A/			Rated	
48 VDC	1,360	1.5 W	Rated	Rated	Hateu	
48 VDC 110 VDC		1.5 W 1.5 W		Rated	Hateu	
48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS	1,360 8,500	1.5 W	Rated		nateu	
48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature	1,360 8,500 -45° to +70° C (-49° to -	1.5 W +158° F) Assumes a	Rated DRY environmen		Hateu	
48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity	1,360 8,500 -45° to +70° C (-49° to -	1.5 W +158° F) Assumes a % to 85% RH (Recon	Rated DRY environmen		Hateu	
48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay)	1,360 8,500 -45° to +70° C (-49° to -	1.5 W +158° F) Assumes a % to 85% RH (Recon 90g (3.2oz.)	Rated DRY environmen nmended)		Hateu	
48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Jnit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions	1,360 8,500 -45° to +70° C (-49° to -	1.5 W +158° F) Assumes a % to 85% RH (Recon	Rated DRY environmen nmended)		Hateu	
48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION	1,360 8,500 -45° to +70° C (-49° to -	1.5 W +158° F) Assumes a % to 85% RH (Recon 90g (3.2oz.) tline drawings on page	Rated DRY environmen nmended) ages 27 - 32		Hateu	
48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts	1,360 8,500 -45° to +70° C (-49° to -	1.5 W +158° F) Assumes a % to 85% RH (Recon 90g (3.2oz.) tline drawings on page	Rated DRY environment nmended) ages 27 - 32		Hateu	
48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts Plated Brass Terminations	1,360 8,500 -45° to +70° C (-49° to -	1.5 W 158° F) Assumes a % to 85% RH (Recon 90g (3.2oz.) tline drawings on pro- AgNi Alloy Cadmium Fr	Rated DRY environment nmended) ages 27 - 32		Hateu	
48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts	1,360 8,500 -45° to +70° C (-49° to - 35° See ou	1.5 W +158° F) Assumes a % to 85% RH (Recon 90g (3.2oz.) tline drawings on page	Rated DRY environment nmended) ages 27 - 32		Hateu	



FLANGE MOUNTED RELAYS WITH BLADE TERMINALS

- DPDT and 3PDT for control circuit application flexibility.
- 25A, DPDT and 20A, 3PDT.
- 3/4HP @ 120V AC, 1HP @ 240V AC.
- AC and DC coils.
- Flange mounting eliminates the need for a socket resulting in lower installed cost.
- Blade terminals (1/4") accept commonly available fast-on connectors.

- Tape wound coils are marked with the coil voltage for easy identification.
- AgNi contacts, environmentally friendly cadmium free.
- Low coil consumption to minimize transformer and power supply requirements.
- cURus and CE for acceptance in global applications.
- Transparent housing to visually monitor switching operations and contact condition.
- 100% tested to ensure performance to specification.

IT'S EASY TO BUILD YOUR OWN RELAY

Simply pick the code number from each of the sections below and combine them to build your part number.

Flange Mounted Relay w/Blade Terminals

GPRF-T // // ///

Example: To build one of our most popular Relays, the part number would be GPRF-T + II + III or GPRF-T2C25ZC

	I. RELAY TYPE	
CODE	DESCRIPTION	LIST
GPRF-T	General Purpose Relay w/Blade	

II. POLES & CURRENT RATING

II. P	ULES & CURREINI	KATING
CODE	DESCRIPTION	LIST
2C25	DPDT, 25A (8 Blade)	_
3C20	3PDT, 20A (11 Blade)	*

	III. COIL VOLTAGES
CODE	DESCRIPTION
С	24V AC
D	120V AC
F	240V AC
ZC	24V DC
ZJ	48V DC
ZD	110V DC

Relays available in convenient multi-packs, consult factory for details.



Flange Mounted w/Blade Terminals / GENERAL PURPOSE



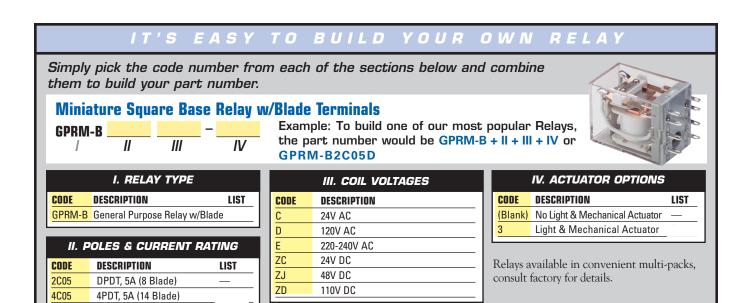
	FLANGE MOUNTED RELAYS WITH	H BLADE TERN	IINALS		
	UNITS				
ELECTRICAL RATINGS					
POLE COMBINATION		DP	DT	3	PDT
Contact Resistance	mΩ	50	0	!	50
Dielectric Strength (Coil to Contact)	AC Volts (50/60 HZ - 1 Minute)	150	0 V	15	00 V
Dielectric Strength (Between Contacts)	AC Volts (50/60 HZ - 1 Minute)	100	0 V		00 V
Insulation Resistance (500 VDC)	MΩ [Min.]	10	00	1	00
Max. Switching (ON/OFF) Mechanical	Oper./Min.	24	10	2	40
Max. Switching (ON/OFF) Electrical	Oper./Min.	3	80		30
Life Expectancy - Mechanical	Operations [Min]	10	M	10	OM
Life Expectancy - Elect (@120 V Resistive)	Operations [Min]	10	0K	10	00K
Vibration: Endurance	1.5 mm (Double Amplitude)	10 ~	55 Hz	10 ~	· 55 Hz
Vibration: Error Operation	1.5 mm (Double Amplitude)	10 ~	55 Hz	10 ~	· 55 Hz
Shock: Endurance	G Min.	5	0	!	50
Shock: Error Operation	G Min.	1	0		10
Coil Operate Time (Pick-Up)	mSec (Max.)	1	5		15
Coil Release Time (Drop Out)	mSec (Max.)	1	0		10
CONTACT RATING	• • •				
Rated Carrying Current		25	Α	2	0 A
Max. Allowable Voltage		600	VAC	600	VAC
		120	VDC	120	VDC
Capacity: Resistive Load	P.F. = 1.0	240 VA0	C - 25 A	240 VA	C - 20 A
		120 VA	C - 25 A	120 VA	C - 20 A
		28 VDC	C - 25 A	28 VD0	: - 13 A
Inductive Loads	P.F. = 0.4 [L/R = 7 mSec.]	240 VA	C - 15 A	240 VA(C - 15 A
		120 VA(C - 25 A	120 VA	C - 20 A
		28 VD	C - 18 A	28 VD0	; - 13 A
Motor Loads	120 VAC	3/4	HP	1/2	. HP
	240 VAC	11	HP.	1/2	2 HP
Minimum Recommended Load		100	mA	100) mA
COIL SPECIFICATIONS (@ 20° C) — (DPDT)					
	0 11 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Power	Pick-Up	Drop-Out	Max. Allowed
NOMINAL COIL VOLTAGE (VOLTS)	Coil Resistance (+/- 10% OHMS)	Consumption	Voltage	Voltage	Voltage
24 VAC (@ 60 HZ)				200/ Min	
	72	2.5 VA	85% Max.	30% Min.	110%
120 VAC (@ 60 HZ)	1,700	2.5 VA	85% Max. Rated	30% Min. Rated	110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ)	1,700 7,200	2.5 VA 2.5 VA			
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC	1,700 7,200 472	2.5 VA 2.5 VA 1.5 W			
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC	1,700 7,200 472 1,800	2.5 VA 2.5 VA 1.5 W 1.5 W	Rated	Rated	Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC	1,700 7,200 472	2.5 VA 2.5 VA 1.5 W	Rated 75% Max.	Rated 10% Min.	Rated 110%
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC	1,700 7,200 472 1,800	2.5 VA 2.5 VA 1.5 W 1.5 W	Rated 75% Max. Rated	Rated 10% Min. Rated	Rated 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT)	1,700 7,200 472 1,800 10,000	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W	Rated 75% Max. Rated Pick-Up	Rated 10% Min. Rated Drop-Out	Rated 110% Rated Max. Allowed
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS)	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS)	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W	Rated 75% Max. Rated	Rated 10% Min. Rated	Rated 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ)	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS)	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA	Rated 75% Max. Rated Pick-Up	Rated 10% Min. Rated Drop-Out	Rated 110% Rated Max. Allowed
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ)	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA	Rated 75% Max. Rated Pick-Up Voltage	Rated 10% Min. Rated Drop-Out Voltage	Rated 110% Rated Max. Allowed Voltage
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ)	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA	Rated 75% Max. Rated Pick-Up Voltage 85% Max.	Rated 10% Min. Rated Drop-Out Voltage 30% Min.	Rated 110% Rated Max. Allowed Voltage 110%
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 1.5 W	Rated 75% Max. Rated Pick-Up Voltage 85% Max.	Rated 10% Min. Rated Drop-Out Voltage 30% Min.	Rated 110% Rated Max. Allowed Voltage 110%
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W	Rated 75% Max. Rated Pick-Up Voltage 85% Max. Rated	10% Min. Rated Drop-Out Voltage 30% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 1.5 W	Pick-Up Voltage 85% Max. Rated	10% Min. Rated Drop-Out Voltage 30% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360 8,500	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W	Pick-Up Voltage 85% Max. Rated 75% Max. Rated	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360 8,500	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W	Pick-Up Voltage 85% Max. Rated 75% Max. Rated 75% Max. Rated	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360 8,500	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W	Pick-Up Voltage 85% Max. Rated 75% Max. Rated 75% Max. Rated	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay)	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360 8,500 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W	Rated 75% Max. Rated Pick-Up Voltage 85% Max. Rated 75% Max. Rated	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360 8,500 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W	Rated 75% Max. Rated Pick-Up Voltage 85% Max. Rated 75% Max. Rated	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360 8,500 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.6 W 1.9	Rated 75% Max. Rated Pick-Up Voltage 85% Max. Rated 75% Max. Rated	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360 8,500 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W 1.5 W 1.5 W 2.75 VA 2.75 VA 3.75 VA 4.75	Rated 75% Max. Rated Pick-Up Voltage 85% Max. Rated 75% Max. Rated DRY environmentumended)	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts Plated Brass Terminations	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360 8,500 -45° to +70° C (-49° to +	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W 1.5 W 1.5 W 2.76 VA 2.76 VA 2.77 VA 2.77 VA 2.78 VA 2.78 VA 2.79 VA 2.79 VA 2.79 VA 2.79 VA 2.79 VA 2.70 VA 2.71 VA 2.71 VA 2.72 VA 2.75	Rated 75% Max. Rated Pick-Up Voltage 85% Max. Rated 75% Max. Rated DRY environmentumended)	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts Plated Brass Terminations Solder Connections	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360 8,500 -45° to +70° C (-49° to + 35% See outline	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W 1.5 W 1.5 W A B TO 85% RH (Reconny 90g (3.2oz.)) E drawings on page AgNi Alloy Cadmium Free Lead Free	Pick-Up Voltage 85% Max. Rated 75% Max. Rated 75% Max. Rated DRY environmentumended)	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated
120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC COIL SPECIFICATIONS (@ 20° C) — (3PDT) NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 24 VDC 48 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts Plated Brass Terminations	1,700 7,200 472 1,800 10,000 Coil Resistance (+/- 10% OHMS) 60 1,300 4,300 340 1,360 8,500 -45° to +70° C (-49° to + 35% See outline	2.5 VA 2.5 VA 1.5 W 1.5 W 1.5 W Power Consumption 2.75 VA 2.75 VA 2.75 VA 1.5 W 1.5 W 1.5 W 1.5 W 1.5 W 2.76 VA 2.76 VA 2.77 VA 2.77 VA 2.78 VA 2.78 VA 2.79 VA 2.79 VA 2.79 VA 2.79 VA 2.79 VA 2.70 VA 2.71 VA 2.71 VA 2.72 VA 2.75	Pick-Up Voltage 85% Max. Rated 75% Max. Rated 75% Max. Rated DRY environmentumended)	Drop-Out Voltage 30% Min. Rated 10% Min. Rated	Rated 110% Rated Max. Allowed Voltage 110% Rated



MINIATURE SQUARE BASE RELAYS W/BLADE TERMINALS

- DPDT and 4PDT for control circuit application flexibility.
- 5A, DPDT and 5A, 4PDT.
- AC and DC coils.
- Blade terminals are interchangeable with other commonly available relays.
- Tape wound coils are marked with the coil voltage for easy identification.
- AgNi contacts, environmentally friendly cadmium free.
- Small size requiring minimum panel space for lower installed cost.
- cURus and CE for acceptance in global applications.

- Optional mechanical actuator and indicating light (red for AC and green for DC) for checking the control circuit operation without energizing the relay and to easily determine the relay status.
- Terminal markings on the relay for easy reference during installation.
- Low coil consumption to minimize transformer and power supply requirements.
- Transparent housing to visually monitor switching operations and contact condition.
- 100% tested to ensure performance to specification.



COMPATIBLE SOCKETS						
RELAY TYPE	COMPATIBLE SOCKETS					
GPRM-B2C05**	GPRA-SB14U1 with Open Style Terminals					
GPRM-B4C05**	34C05**					
NOTE: **Represents the Coil Voltage Code. Refer to Chart III Coil Voltage above.						
See page 26 for socket information.						





	UNI	TS				
LECTRICAL RATINGS	<u> </u>					
POLE COMBINATION			DP	DT	41	PDT
Contact Resistance	mΩ		10			00
Dielectric Strength (Coil to Contact)	AC Volts (50/60 HZ - 1 Minute)		1500 V		1500 V	
lielectric Strength (Between Contacts)		60 HZ - 1 Minute)	1000		1000 V	
nsulation Resistance (500 VDC)	MΩ [· · · · · · · · · · · · · · · · · · ·	100		100	
Max. Switching (ON/OFF) Mechanical		:/Min.	240		240	
Max. Switching (ON/OFF) Electrical	Oper	:/Min.	30		30	
ife Expectancy - Mechanical	<u> </u>	ons [Min]	10M		10M	
ife Expectancy - Elect (@120 V Resistive)		ons [Min]	100K			10K
/ibration: Endurance		ole Amplitude)	10 ~ 55 Hz		10 ~	55 Hz
/ibration: Error Operation		ole Amplitude)	10 ~ 5	5 Hz	10 ~	55 Hz
Shock: Endurance		Min.	10	0	1	00
Shock: Error Operation	G N	Vlin.	10)	1	0
Coil Operate Time (Pick-Up)	mSec	(Max.)	2	5	2	25
Coil Release Time (Drop Out)	mSec	(Max.)	2	5	2	25
Coil Temperature Rise (at rated voltage)	Deg C (Max.)		60		60	
CONTACT RATING			•			
Rated Carrying Current			5	A	5	Α
Max. Allowable Voltage			240 VAC		240 VAC	
			110 VDC		110 VDC	
Capacity: Resistive Load	P.F. = 1.0		240 VAC - 5 A		240 VAC - 5 A	
			120 VAC	- 5 A	120 VAC - 5 A	
			28 VDC - 5 A		28 VDC - 5 A	
nductive Loads	P.F. = 0.4 [L/R = 7 mSec.] 120 VAC - 2 A 28 VDC - 2 A		120 VAC - 2 A		120 VA	C - 3 A
			C - 2 A	28 VDC - 3 A		
Minimum Recommended Load			10 VDC - 10 mA		10 VDC	- 10 mA
COIL SPECIFICATIONS (@ 20° C) — (DPDT & 4PDT)						
NOMINAL COIL VOLTAGE (VOLTS)	Nominal Current	Coil Resistance	Power	Pick-Up	Drop-Out	Max. Allowe
24 VAC (@ 60 HZ)	(m A) 45	(+/- 10% OHMS) 186	Consumption 1.0 ~ 1.3 VA	Voltage	Voltage	Voltage
120 VAC (@ 60 HZ)	10	4,550	1.0 ~ 1.3 VA 1.0 ~ 1.3 VA	85% Max.	30% Min.	110%
220/240 VAC (@ 60 HZ)	8.5	19.400	1.0 ~ 1.3 VA 1.0 ~ 1.3 VA	Rated	Rated	Rated
24 VDC	36.9	650	0.9 W			
48 VDC	18.5	2,600	0.9 W	80% Max.	10% Min.	110%
110 VDC	10.5	13,500	0.9 W	Rated	Rated	Rated
ENVIRONMENTAL/PHYSICAL PARAMETERS	10	13,300	0.9 VV			
Operating Ambient Temperature		25° to +55° C (-13° to +	21° E\ Accumac o	DDV anvironma	nt England	
Operating Humidity	-4	· · · · · · · · · · · · · · · · · · ·			nt — Enclosed	
Jnit Weight (2 and 4 Pole Relay)	45% to 85% RH (Recommended)					
	35g (1.2oz.) See outline drawings on pages 27 - 32					
Relay and Socket Dimensions MATERIALS & CONSTRUCTION		See outil	ie urawings on pa	yes 27 - 32		
Contacts			AgNi Allay			
Plated Brass Terminations			AgNi Alloy Cadmium Fre	10		
Solder Connections			Lead Free	· C		
		TL		hormoset		
Moldings	Thermoplastic and Thermoset					



MINIATURE SQUARE BASE RELAYS W/BLADE TERMINALS

- SPDT and DPDT for control circuit application flexibility.
- 15A, SPDT and 10A, DPDT.
- 1/2HP @ 120V AC, 1/2HP @ 240V AC.
- AC and DC coils.
- Blade terminals (13/64") are interchangeable with other commonly available relays.
- Tape wound coils are marked with the coil voltage for easy identification.
- AgNi contacts, environmentally friendly cadmium free.
- Small size requiring minimum panel space for lower installed cost.
- Optional mechanical actuator and indicating light (red for AC and green for DC) for checking the control circuit operation without energizing the relay and to easily determine the relay status.
- Terminal markings on the relay for easy reference during installation.
- Low coil consumption to minimize transformer and power supply requirements.
- cURus and CE for acceptance in global applications.
- Transparent housing to visually monitor switching operations and contact condition.
- 100% tested to ensure performance to specification.

Simply pick the code number from each of the sections below and combine them to build your part number.

Miniature Square Base Relay w/Blade Terminals



Example: To build one of our most popular Relays, the part number would be GPRM-B + II + III + IV or GPRM-B2C10D-3



I. RELAY TYPE				
CODE	DESCRIPTION	LIST		
GPRM-B	General Purpose Relay w/Blade			

CODE	DESCRIPTION	LIST
1C15	SPDT, 15A (8 Blade)	_
2C10	DPDT, 10A (8 Blade)	-

III. COIL VOLTAGES
DESCRIPTION
24V AC
120V AC
220-240V AC
24V DC
48V DC
110V DC

IV. ACTUATOR OPTIONS				
DESCRIPTION	LIST			
No Light & Mechanical Actuator	_			
Light & Mechanical Actuator				
	DESCRIPTION No Light & Mechanical Actuator			

Relays available in convenient multi-packs, consult factory for details.

NOTE: See page 16 for 4-Pole Miniature Relay.

COMPATIBLE SOCKETS					
RELAY TYPE	COMPATIBLE SOCKETS				
GPRM-B1C15**	GPRA-SB08G1 with IP20 Guarded Terminals or				
GPRM-B2C10**	GPRA-SB08U1 with Open Style Terminals				
NOTE: **Represents the Coil Voltage Code. Refer to Chart III <i>Coil Voltage</i> above.					
See page 25 for socket information.					



Section 26 | 14 REVISION 03.2022

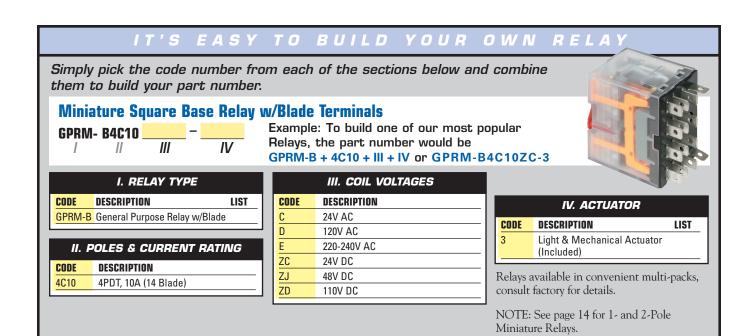


	UNI	TS				
ELECTRICAL RATINGS						
POLE COMBINATION			SP	TOT	DI	PDT
Contact Resistance	m	100		100		
Dielectric Strength (Coil to Contact)	AC Volts (50/6	60 HZ - 1 Minute)	1500 V		1500 V	
Dielectric Strength (Between Contacts)	AC Volts (50/6	1000 V			00 V	
nsulation Resistance (500 VDC)	ΜΩ [10	00	100		
Max. Switching (ON/OFF) Mechanical	Oper	24	40	240		
Max. Switching (ON/OFF) Electrical	Oper	/Min.	30		30	
Life Expectancy - Mechanical	Operation	ons [Min]	10M		10M	
Life Expectancy - Elect (@ Rating)	Operation	ons [Min]	100K		10	0K
Vibration: Endurance	1.0 mm (Doub	le Amplitude)	10 ~ 55 Hz		10 ~	55 Hz
/ibration: Error Operation	1.0 mm (Doub	le Amplitude)	10 ~ 5	55 Hz	10 ~	55 Hz
Shock: Endurance	G N	⁄lin.	10	00	1	00
Shock: Error Operation	G N	/lin.	1	0	1	0
Coil Operate Time (Pick-Up)	mSec	(Max.)	2	25	2	25
Coil Release Time (Drop Out)	mSec	(Max.)	2	25		25
Coil Temperature Rise (at rated voltage)	Deg C	(Max.)	60		60	
CONTACT RATING						
Rated Carrying Current			15 A		10 A	
Max. Allowable Voltage			1	VAC	240 VAC	
	110 VDC		120 VDC			
Capacity: Resistive Load	P.F. =	: 1.0	240 VA0		240 VAC - 10 A	
			120 VAC - 15 A		120 VAC - 10 A	
	DE CALLED 7 C 1			28 VDC - 15 A		- 10 A
Inductive Loads	P.F. = 0.4 [L/R = 7 mSec.]		28 VDC - 7 A 1/2 HP		28 VD0	
Motor Loads	120 VAC 240 VAC		1/2 HP 1/2 HP		1/2 1/2	
Minimum Recommended Load	240 VAC		10 VDC - 10 mA		10 VDC	
COIL SPECIFICATIONS (@ 20° C) —			10 VDC	- TO IIIA	10 VDC	- 10 IIIA
(SPDT & DPDT)						
	Nominal Current	Coil Resistance	Power	Pick-Up	Drop-Out	Max. Allowe
NOMINAL COIL VOLTAGE (VOLTS)	(mA)	(+/- 10% OHMS)	Consumption	Voltage	Voltage	Voltage
24 VAC (@ 60 HZ)	45	160	1.0 ~ 1.3 VA	000/ 84	000/ 84:	1100/
120 VAC (@ 60 HZ)	11.5	3,400	1.0 ~ 1.3 VA	80% Max. Rated	30% Min. Rated	110% Rated
220/240 VAC (@ 60 HZ)	5	13,600	1.0 ~ 1.3 VA	Hateu	Hateu	Hateu
24 VDC	36.9	650	0.9 W	80% Max.	10% Min.	110%
48 VDC	18.5	2,600	0.9 W	Rated	Rated	Rated
110 VDC	10	11,000	0.9 W	Hutou	Hateu	Hatou
ENVIRONMENTAL/PHYSICAL PARAMETERS						
Operating Ambient Temperature	-25	i° to +55° C (-13° to +13	· · · · · · · · · · · · · · · · · · ·		t — Enclosed	
Operating Humidity	45% to 85% RH (Recommended)					
	35g (1.2oz.)					
Jnit Weight (1 ~ 2 Pole Relay)	See outline drawings on pages 27 - 32					
Unit Weight (1 ~ 2 Pole Relay) Relay and Socket Dimensions		See outili				
Unit Weight (1 ~ 2 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION		See outili				
Unit Weight (1 ~ 2 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts		See outili	AgNi Alloy			
Unit Weight (1 ~ 2 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts Plated Brass Terminations		See outil	Cadmium Fre	ee		
Unit Weight (1 ~ 2 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts Plated Brass Terminations Solder Connections Moldings						



MINIATURE SQUARE BASE RELAYS W/BLADE TERMINALS

- 4PDT for control circuit application flexibility.
- 10A, 4PDT.
- 1/2HP @ 120V AC, 1/2HP @ 240V AC.
- AC and DC coils.
- Blade terminals (13/64") are interchangeable with other commonly available relays.
- Tape wound coils are marked with the coil voltage for easy identification.
- AgNi contacts, environmentally friendly cadmium free.
- Small size requiring minimum panel space for lower installed cost.
- Terminal markings on the relay for easy reference during installation.
- Mechanical actuator and indicating light (red for AC and green for DC), provided as standard, for checking the control circuit operation without energizing the relay and to easily determine the relay status.
- Low coil consumption to minimize transformer and power supply requirements.
- cURus and CE for acceptance in global applications.
- Transparent housing to visually monitor switching operations and contact condition.
- Writable marking label allows for fast and easy circuit identification.
- 100% tested to ensure performance to specification.



COMPATIBLE SOCKETS					
RELAY TYPE	COMPATIBLE SOCKETS				
GPRM-B4C10**	C10** GPRA-SB14U2 with Open Style Terminals				
NOTE: **Represents the Coil Voltage Code. Refer to Chart III Coil Voltage above.					
See page 26 for socket information.					





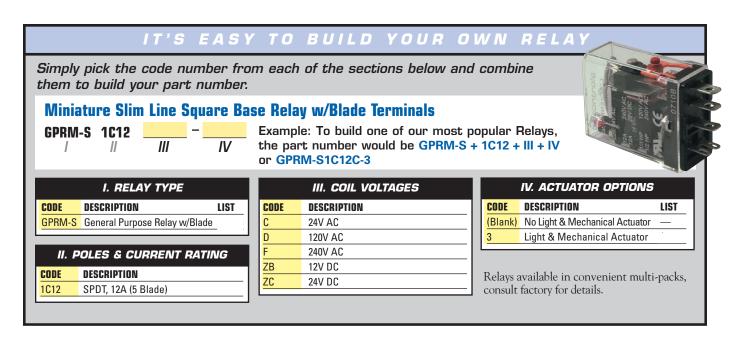
M	NIATURE SQUARE	BASE RELAYS W	ITH BLADE T	ERMINALS		
	UNI	ITS				
ELECTRICAL RATINGS						
POLE COMBINATION				4	PDT	
Contact Resistance	m!		1	100		
Dielectric Strength (Coil to Contact)	AC Volts (50/60	1500 V				
Dielectric Strength (Between Contacts)	AC Volts (50/60	1000 V				
Insulation Resistance (500 VDC)	MΩ [I	100				
Max. Switching (ON/OFF) Mechanical	Oper.,	Oper./Min.			240	
Max. Switching (ON/OFF) Electrical	Oper.,	/Min.	30			
ife Expectancy - Mechanical	Operatio	ns [Min]	10M			
ife Expectancy - Elect (@ Rating)	Operatio	ns [Min]		1	00K	
/ibration: Endurance	1.0 mm (Doubl	e Amplitude)		10 ~	· 55 Hz	
/ibration: Error Operation	1.0 mm (Doubl	e Amplitude)		10 ~	- 55 Hz	
Shock: Endurance	G N	•		•	100	
Shock: Error Operation	G M	1in.			10	
Coil Operate Time (Pick-Up)	mSec ((Max.)			25	
Coil Release Time (Drop Out)	mSec ((Max.)			25	
Coil Temperature Rise (at rated voltage)	Deg C	(Max.)			60	
CONTACT RATING			'			
Rated Carrying Current				1	0 A	
Max. Allowable Voltage			240 VAC			
· ·	110 VDC			VDC		
Capacity: Resistive Load	P.F. = 1.0		240 VAC - 10 A			
			120 VAC - 10 A			
	28 VDC - 10 A			C - 10 A		
nductive Loads	P.F. = 0.4 [L/I	R = 7 mSec.]		28 VC	C - 5 A	
Motor Loads	120 \	/AC		1/:	3 HP	
	240 VAC 1/2 HP					
Minimum Recommended Load	10 VDC - 10 mA					
COIL SPECIFICATIONS (@ 20° C) — (4PDT)						
NOMINAL COLL VOLTACE (VOLTE)	Nominal Current	Coil Resistance	Power	Pick-Up	Drop-Out	Max. Allowed
IOMINAL COIL VOLTAGE (VOLTS)	(mA)	(+/- 10% OHMS)	Consumption	Voltage	Voltage	Voltage
24 VAC (@ 60 HZ)	93.6 (50Hz) ~ 80 (60Hz) 24.5 (50Hz) ~ 21 (60Hz)	78	1.9 ~ 2.5 VA 1.9 ~ 2.5 VA	85% Max.	30% Min.	110%
120 VAC (@ 60 HZ) 220/240 VAC (@ 60 HZ)	, , , ,	1,600	1.9 ~ 2.5 VA 1.9 ~ 2.5 VA	Rated	Rated	Rated
	13.1 (50Hz) ~ 11.2 (60Hz)	6,700 350	1.9 ~ 2.5 VA 1.5 W			
24 VDC 48 VDC	69		1.5 W	80% Max.	10% Min.	110%
	30 15.9	1,600	1.5 W	Rated	Rated	Rated
110 VDC Environmental/Physical parameters	10.9	6,900	1.5 VV			
	2	F0 to . FF0 C / 120 to . 1	210 F\ A aaumaa a	DDV anvironma	nt Fralesad	
Operating Ambient Temperature	-25° to +55° C (-13° to +131° F) Assumes a DRY environment — Enclosed					
Operating Humidity	45% to 85% RH (Recommended)					
Unit Weight (4 Pole Relay)		35g (1.2oz.) See outline drawings on pages 27 - 32				
Relay and Socket Dimensions MATERIALS & CONSTRUCTION		•	see outille araw	iiigs oii pages Zi	1 - 32	
			A ~ N I: A II			
Contacts			AgNi Alloy			
Plated Brass Terminations			Cadmium Fro			
Solder Connections	Lead Free					
Moldings		Ine	rmoplastic and T	nermoset	-	
ROHS COMPLIANCE	I					



MINIATURE SLIM LINE SQUARE BASE RELAYS W/BLADE TERMINALS

- 12A, SPDT.
- 1/3 HP @ 120V AC, 1/2HP @ 240V AC.
- Small size requiring minimum panel space for lower installed costs. Relay is only 14mm (35/64") wide!
- AC and DC coils
- Blade terminals (13/64") are interchangeable with other commonly available relays.
- Tape wound coils are marked with the coil voltage for easy identification.
- AgNi contacts, environmentally friendly cadmium free.

- Optional mechanical actuator and indicating light (red for AC and green for DC) for checking the control circuit operation without energizing the relay and to easily determine the relay status.
- Terminal markings and schematic on the relay for easy reference during installation.
- Low coil consumption to minimize transformer and power supply requirements.
- cURus and CE for acceptance in global applications.
- Transparent housing to visually monitor switching operations and contact condition.
- 100% tested to ensure performance to specification.



COMPATIBLE SOCKETS				
RELAY TYPE	COMPATIBLE SOCKETS			
GPRM-S1C12**	GPRA-SB05G1 with IP20 Guarded Terminals			
NOTE: **Represents the Coil Voltage Code. Refer to Chart III Coil Voltage above.				
See page 25 for socket information.				





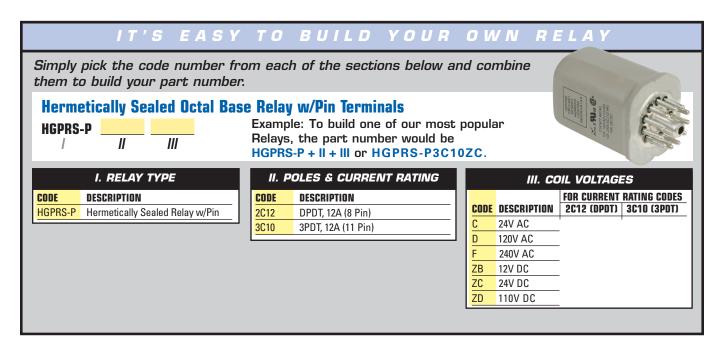
	UN		YS WITH BLA			
ELECTRICAL RATINGS	- Oile	110				
POLE COMBINATION				S	PDT	
Contact Resistance	mΩ		50 50			
Dielectric Strength (Coil to Contact)		HZ - 1 Minute)	2000 V			
Dielectric Strength (Between Contacts)	AC Volts (50/60		1000 V			
nsulation Resistance (500 VDC)	MΩ [1000 V			
Max. Switching (ON/OFF) Mechanical		/Min.	240			
Max. Switching (ON/OFF) Electrical	<u> </u>	/Min.	30			
ife Expectancy - Mechanical	<u> </u>	ons [Min]	50M			
ife Expectancy - Elect (@ 120 V Rating)	•	ons [Min]	500K			
/ibration: Endurance	•	ole Amplitude)	500K 10 ~ 55 Hz			
ibration: Error Operation		ole Amplitude)			- 55 Hz	
Shock: Endurance	G N					
Shock: Error Operation	G N		100			
Coil Operate Time (Pick-Up)	mSec		10 20			
Coil Release Time (Drop Out)		(Max.)	20			
Coil Temperature Rise (at rated voltage)	Deg C	· · ·	20 85			
CONTACT RATING	Deg o	(IVIUX.)			03	
Rated Carrying Current				1	2 A	
Max. Allowable Voltage			240 VAC			
viax. Allowable voltage			110 VDC			
Capacity: Resistive Load	P.F. = 1.0		240 VAC - 12 A			
Supusity, Hosiouro Loud	1.1. – 1.0		24 VDC - 12 A			
nductive Loads	P.F. = 0.4 [L/R = 7 mSec.]				AC - 7 A	
	5[2]	,	24 VDC - 7 A			
Minimum Recommended Load			10 VDC - 10 mA			
COIL SPECIFICATIONS (@ 20° C) — (SPDT)						
	Nominal Current	Coil Resistance	Power	Pick-Up	Drop-Out	Max. Allowe
IOMINAL COIL VOLTAGE (VOLTS)	(mA)	(+/- 10% OHMS)	Consumption	Voltage	Voltage	Voltage
24 VAC (@ 60 HZ)	72	180	1.7 VA	85% Max.	30% Min.	110%
120 VAC (@ 60 HZ)	14	4,300	1.7 VA	Rated	Rated	Rated
240 VAC (@ 60 HZ)	7	15,720	1.7 VA			
12 VDC	64	188	0.8 W	80% Max.	10% Min.	110%
24 VDC	32	750	0.8 W	Rated	Rated	Rated
NVIRONMENTAL/PHYSICAL PARAMETERS						
Operating Ambient Temperature	-30° to +70° C (-22° to +158° F) Assumes a DRY environment — Enclosed					
perating Humidity	45% to 85% RH (Recommended)					
Init Weight	24g (0.9oz.)					
lelay and Socket Dimensions		See outline o	drawings on page	es 27 - 32		
MATERIALS & CONSTRUCTION						
Contacts			AgNi Alloy			
Plated Brass Terminations			Cadmium Fre	ee		
Solder Connections	Lead Free					
Moldingo	Thermoplastic and Thermoset					
Moldings ROHS COMPLIANCE		11101				



HERMETICALLY SEALED OCTAL BASE RELAYS W/PIN TERMINALS

- 12A, DPDT and 12A, 3PDT, for control circuit application flexibility.
- 1/3 HP @ 120V AC, 1/2 HP @ 240V AC.
- AC and DC coils.
- Temperature Code T4A.
- Suitable for use in Class 1, Division 2 Group A, B, C and D, and Zone 2, Group IIA, IIB and IIC Hazardous Locations.
- Hermetically sealed metal enclosure.

- Vacuum baked and dry nitrogen filled removes contaminants and provides a clean and dry atmosphere for contacts.
- Plug-in style, uses standard sockets (see page 24).
- Schematic diagram and terminal markings on the relay for easy reference during installation.
- Low coil consumption to minimize transformer and power supply requirements.
- 100% tested to ensure performance to specifications.
- cURus and CSA.



COMPATIBLE SOCKETS			
RELAY TYPE	COMPATIBLE SOCKETS		
HGPRS-P2C12*	GPRA-SP08G1 with IP20 Guarded Terminals GPRA-SP08U1 with Open Style Terminals		
HGPRS-P3C10*	GPRA-SP11G1 with IP20 Guarded Terminals GPRA-SP11U1 with Open Style Terminals		
NOTE: **Represents the Coil Voltage Code. Refer to Chart III Coil Voltage above.			
See page 24 for socket information.			



Octal Base w/Pin Terminals / HERMETICALLY SEALED

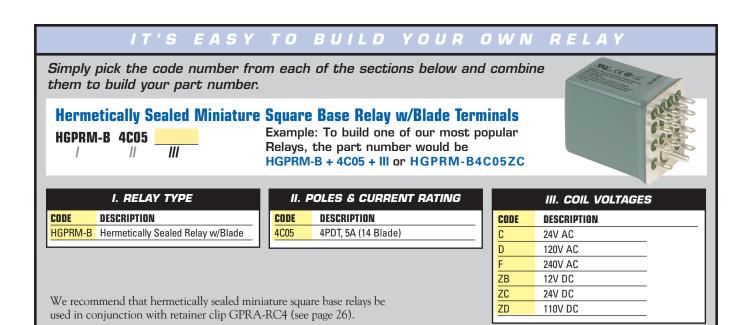


	CALLY SEALED OCTAL BASE RE UNITS	EATS WITH PI				
ELECTRICAL RATINGS	UNIIS					
POLE COMBINATION		DP	DT	21	PDT	
Dielectric Strength (Coil to Contact)	AC Volto (E0/60 UZ 1 Minuta)	125			101 50 V	
	AC Volts (50/60 HZ - 1 Minute)					
Dielectric Strength (Between Contacts)	AC Volts (50/60 HZ - 1 Minute)	125			50 V	
Insulation Resistance (500 VDC)	MΩ [Min.]	10			00	
Max. Switching (ON/OFF) Electrical	Oper./Min.	6			6	
Life Expectancy - Mechanical	Operations [Min]	51			iΜ	
Life Expectancy - Elect (@120 V Resistive)	Operations [Min]	100			00K	
Vibration: Endurance	1.0 mm (Double Amplitude)		55 Hz		55 Hz	
	G Min.	3	3		3	
Shock:	Mechanical	10	G	10	D G	
Coil Operate Time (Pick-Up)	mSec (Max.)	1!	5		15	
Coil Release Time (Drop Out)	mSec (Max.)	1	0		10	
CONTACT RATING						
Rated Carrying Current		12	A	12	2 A	
Max. Allowable Voltage		240	VAC	240	VAC	
		28 \	/DC	28	VDC	
Capacity: Resistive Load	P.F. = 1.0	240 VA0	C - 8 A	240 VA	AC - 6 A	
• •		120 VA0	C - 12 A	120 VA	120 VAC - 10 A	
		28 VDC	28 VDC - 10 A		28 VDC - 10 A	
Inductive Loads	P.F. = 0.4 [L/R = 7 mSec.]	240 VAC			AC - 4 A	
maddivo Edado	= 0.1 [L/11 = 7 medd.]			AC - 7 A		
		28 VD0	-		C - 7 A	
Motor Loads	120 VAC	1/3			HP	
IVIOLOI LOdus	240 VAC	1/3	I		HP	
Minimum Recommended Load	Switching [0.5 watts]	100 mA			@ 5 VDC	
COIL SPECIFICATIONS (@ 25° C (77° F)) — (DPDT)	Owntoning [0.5 watts]	100 1117	9 0 4 0 0	100 11174	@ 0 VD0	
Temperature Code		T4A				
Temperature Gode		Power	Pick-Up	Drop-Out	Max. Allowe	
NOMINAL COIL VOLTAGE (VOLTS)	Coil Resistance (+/- 10% OHMS)	Consumption	Voltage	Voltage	Voltage	
24 VAC (@ 60 HZ)	72	1.2 VA				
120 VAC (@ 60 HZ)	1,700	1.2 VA	85% Max.	15% Min.	110%	
240 VAC (@ 60 HZ)	7,200	1.2 VA	Rated	Rated	Rated	
12 VDC	120	0.9 W				
24 VDC	470	0.9 W	80% Max.	10% Min.	110%	
			Rated	Rated	Rated	
110 VDC	10,000	0.9 W				
					•	
		T4A				
COIL SPECIFICATIONS (@ 25° C (77° F)) — (3PDT) Temperature Code		T4A		D 0.		
Temperature Code	Cail Pacietanes (L.L. 10% DUMS)	Power	Pick-Up	Drop-Out		
Temperature Code NOMINAL COIL VOLTAGE (VOLTS)	Coil Resistance (+/– 10% OHMS)	Power Consumption		Drop-Out Voltage	Max. Allowe Voltage	
Temperature Code NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ)	72	Power Consumption 2 VA	Pick-Up			
Temperature Code NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ)	72 1,700	Power Consumption 2 VA 2 VA	Pick-Up Voltage	Voltage	Voltage	
NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ)	72 1,700 7,200	Power Consumption 2 VA 2 VA 2 VA	Pick-Up Voltage 85% Max.	Voltage 15% Min.	Voltage	
NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC	72 1,700 7,200 120	Power Consumption 2 VA 2 VA 2 VA 1.2 W	Pick-Up Voltage 85% Max. Rated	Voltage 15% Min. Rated	Voltage 110% Rated	
NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC	72 1,700 7,200 120 470	Power Consumption 2 VA 2 VA 2 VA 1.2 W	Pick-Up Voltage 85% Max.	Voltage 15% Min.	Voltage	
Temperature Code NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC	72 1,700 7,200 120	Power Consumption 2 VA 2 VA 2 VA 1.2 W	Pick-Up Voltage 85% Max. Rated 80% Max.	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
Temperature Code NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS	72 1,700 7,200 120 470 10,000	Power Consumption 2 VA 2 VA 2 VA 1.2 W 1.2 W	Pick-Up Voltage 85% Max. Rated 80% Max. Rated	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature	72 1,700 7,200 120 470 10,000	Power Consumption 2 VA 2 VA 2 VA 1.2 W 1.2 W 1.2 W 1.2 W	Pick-Up Voltage 85% Max. Rated 80% Max. Rated	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Assumes a DRY environment — Enclosed	72 1,700 7,200 120 470 10,000 AC: Operate	Power Consumption 2 VA 2 VA 2 VA 1.2 W 1.2 W 1.2 W 1.2 W 1.5 W 1.5 C (-49° to +55° C (-49° to	Pick-Up Voltage 85% Max. Rated 80% Max. Rated -49° to +131° F) ° to + 131° F)	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
Temperature Code NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Assumes a DRY environment — Enclosed Operating Humidity	72 1,700 7,200 120 470 10,000 AC: Operate	Power Consumption 2 VA 2 VA 2 VA 1.2 W 1.2 W 1.2 W 1.2 W 1.2 W 1.5 W 1.5 W 1.6 C (-49° to +55° C (-49° to 85% RH (Recom	Pick-Up Voltage 85% Max. Rated 80% Max. Rated -49° to +131° F) ° to + 131° F)	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Assumes a DRY environment — Enclosed Operating Humidity Unit Weight (2 ~ 3 Pole Relay)	72 1,700 7,200 120 470 10,000 AC: Operated: DC Operated:	Power Consumption 2 VA 2 VA 2 VA 1.2 W 1.2 W 1.2 W 1.2 W 1.2 W 1.2 W 1.3 W 1.45° to +55° C (-49° to +55° C (-49° to 85% RH (Recom 130g (4.6 oz.)	Pick-Up Voltage 85% Max. Rated 80% Max. Rated -49° to +131° F) ° to + 131° F)	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
Temperature Code NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Assumes a DRY environment — Enclosed Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions	72 1,700 7,200 120 470 10,000 AC: Operated: DC Operated:	Power Consumption 2 VA 2 VA 2 VA 1.2 W 1.2 W 1.2 W 1.2 W 1.2 W 1.5 W 1.5 W 1.6 C (-49° to +55° C (-49° to 85% RH (Recom	Pick-Up Voltage 85% Max. Rated 80% Max. Rated -49° to +131° F) ° to + 131° F)	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
Temperature Code NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Assumes a DRY environment — Enclosed Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions	72 1,700 7,200 120 470 10,000 AC: Operated: DC Operated:	Power Consumption 2 VA 2 VA 2 VA 1.2 W 1.2 W 1.2 W 1.2 W 1.2 W 1.2 W 1.3 W 1.45° to +55° C (-49) to 85% RH (Recommendated by 130g (4.6 oz.) line drawings on page	Pick-Up Voltage 85% Max. Rated 80% Max. Rated -49° to +131° F) ° to + 131° F)	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Assumes a DRY environment — Enclosed Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION	72 1,700 7,200 120 470 10,000 AC: Operated: DC Operated:	Power Consumption 2 VA 2 VA 2 VA 1.2 W 1.3 W 1.45° to +55° C (-49) 1.5 to 85% RH (Recom 130g (4.6 oz.) 1 Ag Alloy	Pick-Up Voltage 85% Max. Rated 80% Max. Rated -49° to +131° F) or to + 131° F) mended) liges 27 - 32	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Assumes a DRY environment — Enclosed Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts	72 1,700 7,200 120 470 10,000 AC: Operated: DC Operated:	Power Consumption 2 VA 2 VA 2 VA 1.2 W 1.2 W 1.2 W 1.2 W 1.2 W 1.2 W 1.3 W 1.45° to +55° C (-49) to 85% RH (Recommendated by 130g (4.6 oz.) line drawings on page	Pick-Up Voltage 85% Max. Rated 80% Max. Rated -49° to +131° F) or to + 131° F) mended) liges 27 - 32	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Assumes a DRY environment — Enclosed Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts Plated Terminations	72 1,700 7,200 120 470 10,000 AC: Operated: DC Operated:	Power Consumption 2 VA 2 VA 2 VA 1.2 W 1.3 W 1.45° to +55° C (-49) 1.5 to 85% RH (Recom 130g (4.6 oz.) 1 Ag Alloy	Pick-Up Voltage 85% Max. Rated 80% Max. Rated -49° to +131° F) or to + 131° F) mended) liges 27 - 32	Voltage 15% Min. Rated 10% Min.	Voltage 110% Rated	
NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature Assumes a DRY environment — Enclosed Operating Humidity Unit Weight (2 ~ 3 Pole Relay) Relay and Socket Dimensions MATERIALS & CONSTRUCTION Contacts Plated Terminations Solder Connections	72 1,700 7,200 120 470 10,000 AC: Operated: 35% See outl	Power Consumption 2 VA 2 VA 1.2 W 1.2 W 1.2 W 1.2 W 1.2 W 1.3 W 1.45° to +55° C (-49) to 85% RH (Recommendated by 130g (4.6 oz.) line drawings on parameters of Ag Alloy Cadmium Free	Pick-Up Voltage 85% Max. Rated 80% Max. Rated -49° to +131° F) or to +131° F) mended) 10 mended	Voltage 15% Min. Rated 10% Min. Rated	Voltage 110% Rated	
Temperature Code NOMINAL COIL VOLTAGE (VOLTS) 24 VAC (@ 60 HZ) 120 VAC (@ 60 HZ) 240 VAC (@ 60 HZ) 12 VDC 24 VDC 110 VDC ENVIRONMENTAL/PHYSICAL PARAMETERS Operating Ambient Temperature	72 1,700 7,200 120 470 10,000 AC: Operated: 35% See outl	Power Consumption 2 VA 2 VA 1.2 W 1.2 W 1.2 W 1.2 W 1.2 W 1.3 W 1.45° to +55° C (-49) to 85% RH (Recommendated by 130g (4.6 oz.) line drawings on paragraphs of the drawings of	Pick-Up Voltage 85% Max. Rated 80% Max. Rated -49° to +131° F) ° to +131° F) mended) ges 27 - 32	Voltage 15% Min. Rated 10% Min. Rated	Voltage 110% Rated	



HERMETICALLY SEALED MINIATURE SQUARE BASE RELAYS W/BLADE TERMINALS

- 5A, 4PDT for control circuit application flexibility.
- AC and DC coils.
- Suitable for use in Class 1, Division 2 Group A, B, C and D, and Zone 2, Group IIA, IIB and IIC Hazardous Locations.
- Temperature Code T4A.
- Hermetically sealed metal enclosure.
- Vacuum baked and dry nitrogen filled removes contaminants and provides a clean and dry atmosphere for contacts.
- Plug-in style, uses standard sockets (see page 26).
- Schematic diagram and terminal markings on the relay for easy reference during installation.
- Low coil consumption to minimize transformer and power supply requirements.
- cURus, CSA and CE for acceptance in global applications.
- 100% tested to ensure performance to specifications.



COMPATIBLE SOCKETS		
RELAY TYPE	COMPATIBLE SOCKETS	
HGPRM-B4C05**	GPRA-SB14U1 with Open Style Terminals	
NOTE: **Represents the Coil Voltage Code. Refer to Chart III Coil Voltage above.		
See page 26 for socket information.		





HERWEIICALLY SEA	ALED MINIATURE SQUARE BA UNITS	SE RELAYS W	IIH BLADE II	ERMINALS		
ELECTRICAL RATINGS	ONITO					
POLE COMBINATION			4	PDT		
Dielectric Strength (Coil to Contact)	AC Volts (50/60 HZ - 1 Minute)			40 V		
Dielectric Strength (Between Contacts)	AC Volts (50/60 HZ - 1 Minute)		1240 V 500 V			
nsulation Resistance (500 VDC)	MΩ [Min.]		100			
Max. Switching (ON/OFF) Mechanical	Oper./Min.	30				
Max. Switching (ON/OFF) Electrical	Oper./Min.	6				
Life Expectancy - Mechanical	Operations [Min]		1	0M		
Life Expectancy - Elect (@120 V Resistive)	Operations [Min]		100K			
/ibration: Endurance	1.0 mm (Double Amplitude)		10 ~ 55 Hz			
	G Min.			3		
Shock	Functional		1	0 G		
Coil Operate Time (Pick-Up)	mSec (Max.)			13		
Coil Release Time (Drop Out)	mSec (Max.)			6		
CONTACT RATING	• • •	<u>'</u>				
Rated Carrying Current				5 A		
Max. Allowable Voltage			240	O VAC		
			30	VDC		
Capacity: Resistive Load	P.F. = 1.0	240 VAC - 5 A				
	120 VAC - 5 A					
		30 VDC - 5 A				
Inductive Loads	P.F. = 0.4 [L/R = 7 mSec.]	240 VAC - 3 A 120 VAC - 3 A 30 VDC - 2 A				
Minimum Recommended Load	Switching [AC/DC] 100 mA @ 5 VDC					
COIL SPECIFICATIONS (@ 25° C (77° F)) — (4PDT)						
Femperature Code		T4A				
		Power	Pick-Up	Drop-Out	Max. Allowed	
IOMINAL COIL VOLTAGE (VOLTS)	Coil Resistance (+/- 10% OHMS)	Consumption	Voltage	Voltage	Voltage	
24 VAC (@ 60 HZ)	180	1.2 VA	050/ 84			
120 VAC (@ 60 HZ)	4,430	1.2 VA	85% Max. Rated	15% Min.	110% Rated	
240 VAC (@ 60 HZ)	15,720	1.2 VA	Hateu	Rated	nateu	
12 VDC	160	0.9 W				
24 VDC	650	0.9 W	80% Max.	10% Min.	110%	
110 VDC	13,800	0.9 W	Rated	Rated	Rated	
NVIRONMENTAL/PHYSICAL PARAMETERS						
Operating Ambient Temperature	-40° to +70° C (-49° to	-158° F) Assumes a	DRY environme	nt — Enclosed		
Operating Humidity	35%	to 85% RH (Recon				
Jnit Weight (4 Pole Relay)	45g (1.6 oz.)					
Relay and Socket Dimensions	See outline	e drawings on page	es 27 - 32			
MATERIALS & CONSTRUCTION		<u> </u>				
Contacts		Ag Alloy				
Plated Terminations		Cadmium Fro	ee			
Solder Connections		Lead Free				
Moldings	•	c and Thermoset –				
Protective Covering		vith baked enamel				
ROHS COMPLIANCE	For RoHS compliance documentation by product, refer to www.c3controls.com					



General Purpose Pin & Blade Relay Sockets

- DIN rail mounting for fast and easy installation.
- IP20 guarded terminals to prevent accidental contact with live parts.
- Combination head (+/-) terminal screws accept straight, phillips, or pozidrive screwdrivers.
- cURus and CE for acceptance in global applications.
- Open style terminals to accept ring tongue terminals.
- Panel mounting for secure installation in high vibration and shock installations.
- Break resistant polycarbonate or glass-filled nylon.



10A

	36 100
	8 PIN GUARDED,
CODE	DESCRIPTION

GPRA-SP08G1 8 Pin Guarded

SPECIFICATIONS:

TYPE: Surface or DIN Rail Mount

CURRENT CARRYING MEMBERS:

Phosphor Bronze Nickel Plated Steel

TERMINALS: IP20, Screw w/captive wire clamps

WIRE SIZE: 22AWG-14AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm]

ELECTRICAL RATING: 10A, 600V AC

ROHS COMPLIANCE

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRS-P2C10** and HGPRS-P2C12**

NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to pages 4 & 20.

RETAINER CLIP: GPRA-RC3



8 PIN UNGUARDED, 10A

CODE GPRA-SP08U1	DESCRIPTION
GPRA-SP08U1	8 Pin Unquarded

SPECIFICATIONS:

TYPE: Surface or DIN Rail Mount

CURRENT CARRYING MEMBERS:

Phosphor Bronze Nickel Plated Steel

TERMINALS: Open style, Screw w/captive wire clamps.

WIRE SIZE: 22AWG-14AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm]

ELECTRICAL RATING: 10A, 600V AC

ROHS COMPLIANCE

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRS-P2C10** and HGPRS-P2C12**

NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to pages 4 & 20.

RETAINER CLIP: GPRA-RC3



11 PIN GUARDED, 10A

CODE	DESCRIPTION	
GPRA-SP11G1	11 Pin Guarded	
SDECIFICATIONS:		

TYPE: Surface or DIN Rail Mount

CURRENT CARRYING MEMBERS:

Phosphor Bronze Nickel Plated Steel

TERMINALS: IP20, Screw w/captive wire clamps

WIRE SIZE: 22AWG-14AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm]

ELECTRICAL RATING: 10A, 600V AC

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRS-P3C10** and HGPRS-P3C10**

NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to pages 4 & 20.

RETAINER CLIP: GPRA-RC3





11 PIN UNGUARDED, 10A

CODE	DESCRIPTION
GPRA-SP11U1	11 Pin Unguarded

SPECIFICATIONS:

TYPE: Surface or DIN Rail Mount

CURRENT CARRYING MEMBERS:

Phosphor Bronze Nickel Plated Steel

TERMINALS: Open style, Screw w/captive wire clamps.

WIRE SIZE: 22AWG-14AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm]

ELECTRICAL RATING: 10A, 600V AC

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRS-P3C10** and HGPRS-P3C10**

NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to pages 4 & 20.

RETAINER CLIP: GPRA-RC3

& 11 BLADE GUARDED & UNGUARDED SOCKET



MINIATURE 5 BLADE GUARDED, 15A

CODE	DESCRIPTION
GPRA-SB05G1	Mini 5 Blade Guarded

SPECIFICATIONS:

TYPE: Surface or DIN Rail Mount

CURRENT CARRYING MEMBERS: Phosphor Bronze Nickel Plated Steel

TERMINALS: IP20, Screw w/captive wire clamps

WIRE SIZE: 22AWG-16AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm]

ELECTRICAL RATING: 15A, 300V AC

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRM-S1C12**

NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to page 18.

RETAINER CLIP: GPRA-RC4



MINIATURE 8 BLADE GUARDED, 15A

CODE	DESCRIPTION
GPRA-SB08G1	Mini 8 Blade Guarded

SPECIFICATIONS:

TYPE: Surface or DIN Rail Mount

CURRENT CARRYING MEMBERS:

Phosphor Bronze Nickel Plated Steel

TERMINALS: IP20, Screw w/captive wire clamps

WIRE SIZE: 22AWG-14AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm] ELECTRICAL RATING: 15A, 300V AC

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRM-B1C15** and GPRM-B2C10**

NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to page 14.

RETAINER CLIP: GPRA-RC2



11 BLADE GUARDED, 20/25A

CODE	DESCRIPTION
GPRA-SB11G1	11 Blade Guarded

SPECIFICATIONS:

TYPE: Surface or DIN Rail Mount **CURRENT CARRYING MEMBERS:**

Phosphor Bronze Nickel Plated Steel

TERMINALS: IP20, Screw w/captive wire clamps

WIRE SIZE: 22AWG-12AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm] ELECTRICAL RATING: DPDT: 25A, 300V AC

and 3PDT: 20A, 300V AC

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRS-B2C13**. GPRS-B2C25**, GPRS-B3C13** and GPRS-B3C20**

NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to pages 6 & 8.

RETAINER CLIP: GPRA-RC1



MINIATURE 8 BLADE UNGUARDED, 15A

CODE	DESCRIPTION	
GPRA-SB08U1	Mini 8 Blade Unguarded	
SPECIFICATIONS:		
TYPE: Surface or DIN Rail Mount		
CURRENT CARRYING MEMBERS:		
Phosphor Bronze Nickel Plated Steel		

TERMINALS: Open style, Screw w/captive wire clamps

WIRE SIZE: 22AWG-14AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm] ELECTRICAL RATING: 15A, 300V AC

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRM-B1C15** and GPRM-B2C10**

NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to page 14.

RETAINER CLIP: GPRA-RC2



11 BLADE UNGUARDED, 20/25A

ı	CODE	DESCRIPTION
ı	GPRA-SB11U1	11 Blade Unguarded
GPRA-SB11U1 11 Blade Ungu SPECIFICATIONS:		

TYPE: Surface or DIN Rail Mount

CURRENT CARRYING MEMBERS:

Phosphor Bronze Nickel Plated Steel

TERMINALS: Open style, Screw w/captive wire clamps

WIRE SIZE: 22AWG-12AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm] ELECTRICAL RATING: DPDT: 25A, 300V AC and 3PDT: 20A, 300V AC

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRS-B2C13**, GPRS-B2C25**, GPRS-B3C13** and GPRS-B3C20**

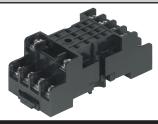
NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to pages 6 & 8.

RETAINER CLIP: GPRA-RC1





14 BLADE UNGUARDED SOCKETS



MINIATURE 14 BLADE UNGUARDED, 7A

CODE DESCRIPTION
GPRA-SB14U1 Mini 14 Blade Unguarded

SPECIFICATIONS:

TYPE: Surface or DIN Rail Mount

CURRENT CARRYING MEMBERS:

Phosphor Bronze Nickel Plated Steel

TERMINALS: Open style, Screw w/captive wire clamps

WIRE SIZE: 24AWG-16AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm]

ELECTRICAL RATING: 7A, 300V AC

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRM-B2C05**, GPRM-B4C05** and HGPRM-B4C05**

NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to pages 12 & 22.

RETAINER CLIP: GPRA-RC4



DISCOUNT SCHEDULE

MINIATURE 14 BLADE UNGUARDED, 15A

CODE DESCRIPTION
GPRA-SB14U2 Mini 14 Blade Unguarded

SPECIFICATIONS:

TYPE: Surface or DIN Rail Mount

CURRENT CARRYING MEMBERS:

Phosphor Bronze Nickel Plated Steel

TERMINALS: Open style, Screw w/captive wire clamps

WIRE SIZE: 22AWG-14AWG

RECOMMENDED TORQUE: 7-10 lb-in. [.8-1.1 Nm]

ELECTRICAL RATING: 15A, 300V AC

FOR USE WITH:

GENERAL PURPOSE RELAY: GPRM-B4C10**

NOTE: **Represents the Coil Voltage Code. For Coil Voltage Codes refer to page 16.

RETAINER CLIP: GPRA-RC4

RETAINER CLIPS FOR SOCKETS



Recommended for use in high vibration applications to further secure relay in socket. For RoHS compliance documentation by product, refer to www.c3controls.com.

For use with GPRA-SB11U1 & GPRA-SB11G1 Sockets.

CODE DESCRIPTION QTY./PKG. LIST/PC.

GPRA-RC1 Retainer Clip 10



For use with GPRA-SB08U1 & GPRA-SB08G1 Sockets.

CODE DESCRIPTION QTY./PKG. LIST/PC.

GPRA-RC2 Retainer Clip 10



For use with GPRA-SB05G1, GPRA-SB14U1 and GPRA-SB14U2 Sockets.

CODEDESCRIPTIONQTY./PKG.LIST/PR.GPRA-RC4Retainer Clip10 pair

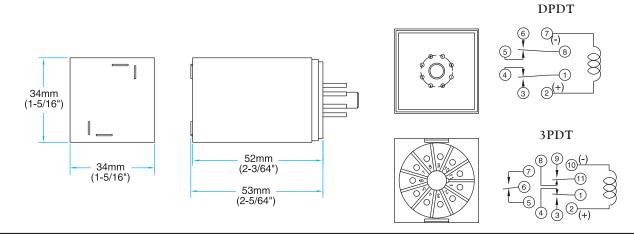
For use with GPRA-SP08U1, GPRA-SP08G1, GPRA-SP11U1 & GPRA-SP11G1 Sockets.

CODE DESCRIPTION OTY./PKG. LIST/PR.

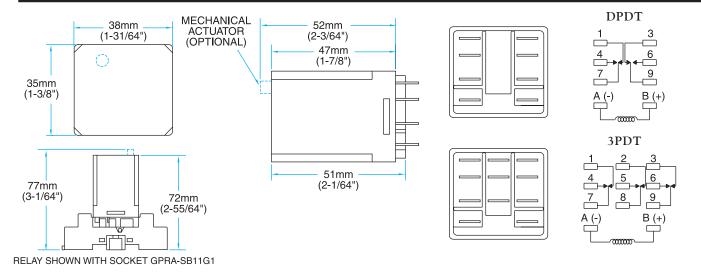
GPRA-RC3 Retainer Clip 10 pair



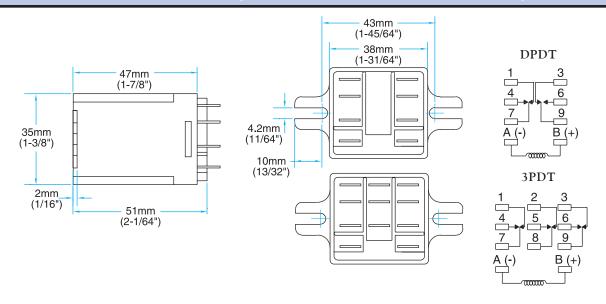
OCTAL BASE RELAYS W/PIN TERMINALS - 2 & 3 POLES (GPRS-P2C10 & P3C10)



SQUARE BASE RELAYS W/BLADE TERMINALS - 2 & 3 POLES (GPRS-B2C13, B3C13, B2C25 & B3C20,

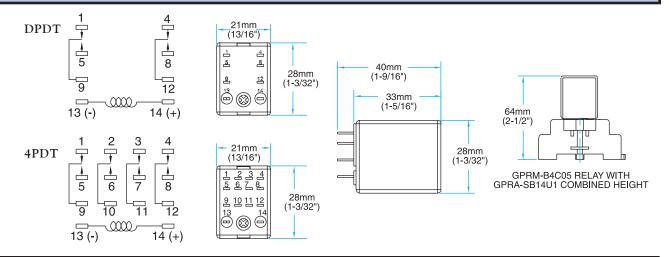


FLANGE MOUNTED RELAYS W/BLADE TERMINALS - 2 & 3 POLES (GPRF-T2C25 & T3C20)

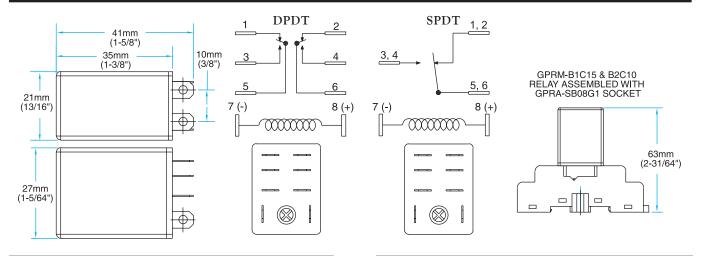




MINIATURE SQUARE RASE RELAYS W/RUARE TERMINALS 2 & 4 POLES (GREWERSCOS & RACOS)

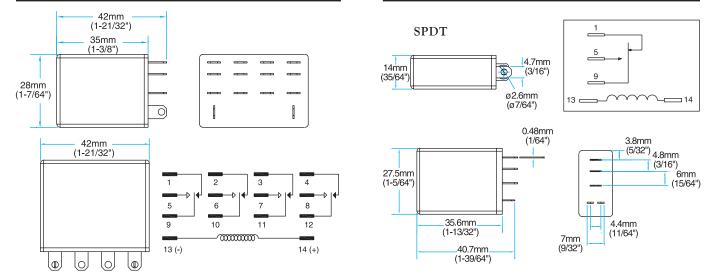


MINIATURE SQUARE BASE RELAYS W/BLADE TERMINALS, 1 & 2 POLES (GPRM-B1C15 & B2C10)



MINIATURE SQUARE BASE RELAYS W/ BLADE TERMINALS - 4 POLES (GPRM-B4C10)

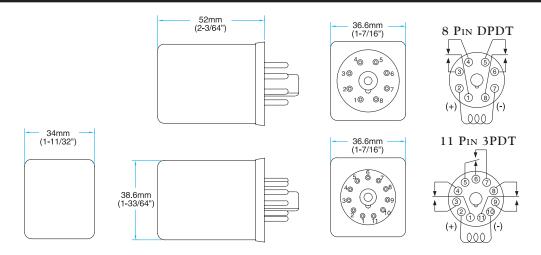
MINIATURE SQUARE BASE RELAYS W/BLADE TERMINALS - 1 POLE (GPRM-S1C12)



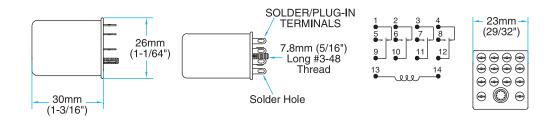
Section 26 | 28REVISION 03.2022



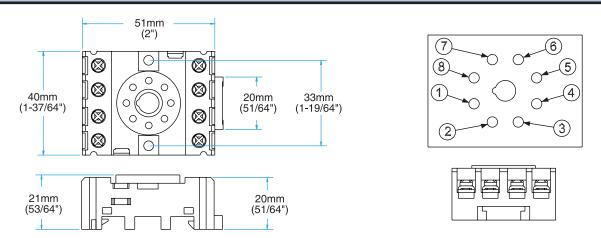
HERMETICALLY SEALED OCTAL BASE RELAYS W/PIN TERMINALS - 2 & 3 POLES (HGPRS-P2C12 & P3C10)



HERMETICALLY SEALED MINIATURE SQUARE BASE RELAYS W/BLADE TERMINALS - 4 POLES (HGPRM-B4C05)

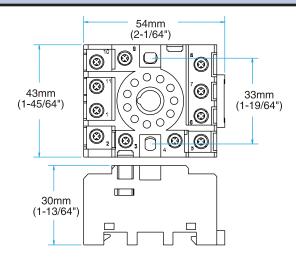


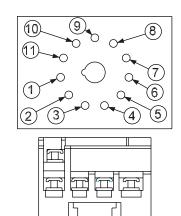
8 PIN GUARDED 10A SOCKET (GPRA-SP08G1)



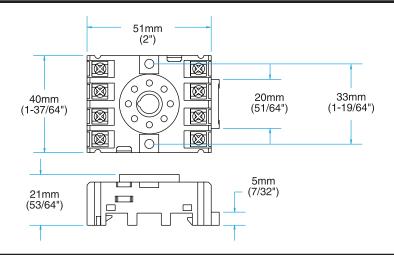


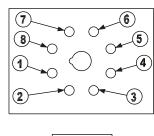
11 PIN GUARDED 10A SOCKET (GPRA-SP11G1)

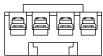




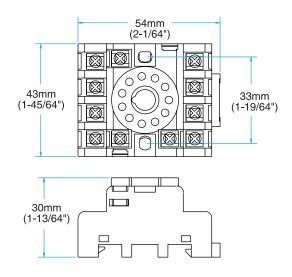
8 PIN UNGUARDED 10A SOCKET (GPRA-SP08U1)

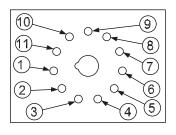


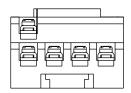




11 PIN UNGUARDED 10A SOCKET (GPRA-SP11U1)

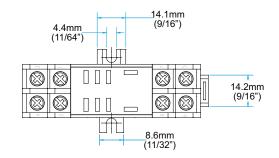


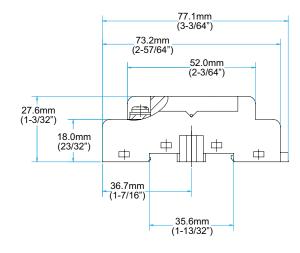


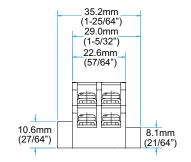




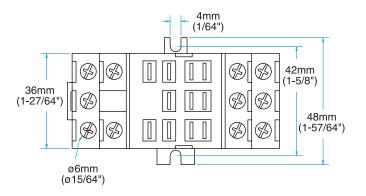
MINIATURE 8 BLADE GUARDED 15A SOCKET (GPRA-SB08G1)

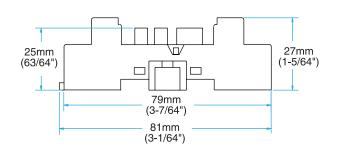


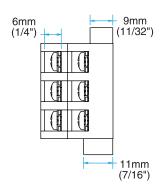




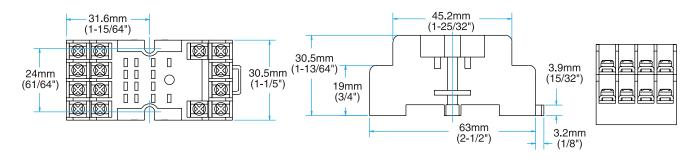
11 BLADE GUARDED 20/25A SOCKET (GPRA-SB11G1)





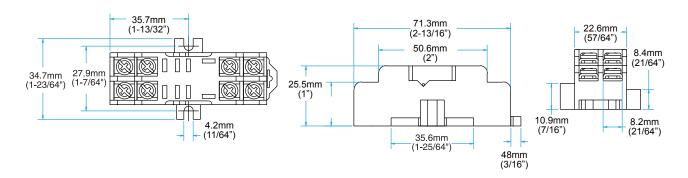


MINIATURE 14 BLADE UNGUARDED 7A SOCKET (GPRA-SB14U1)

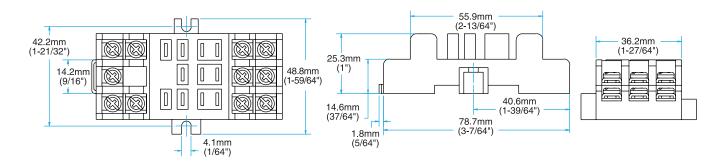




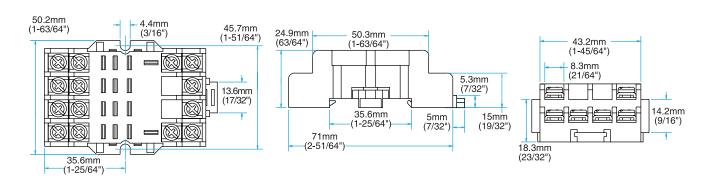
MINIATURE 8 BLADE UNGUARDED 15A SOCKET (GPRA-SB08U1)



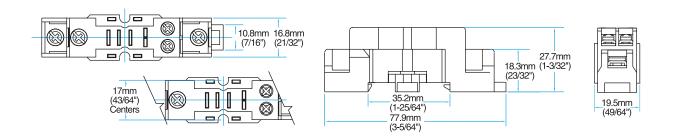
MINIATURE 11 BLADE UNGUARDED 20/25A SOCKET (GPRA-SB11U1)



MINIATURE 14 BLADE UNGUARDED 15A SOCKET (GPRA-SB14U2)



MINIATURE 5 BLADE GUARDED 15A SOCKET (GPRA-SB05G1)



Section 26 | 32